

FILE 'USPAT' ENTERED AT 18:26:55 ON 25 SEP 1998

* * * * *
* W E L C O M E T O T H E *
* U . S . P A T E N T T E X T F I L E *
* * * * *

claim's
8x9

=> d acc 5729016, ccls

US PAT NO: 5,729,016 [IMAGE AVAILABLE] ANS: 1
US-CL-CURRENT: 250/334, 332; 348/148

=> d acc 5691696,, ccls

US PAT NO: 5,691,696 [IMAGE AVAILABLE] ANS: 1
US-CL-CURRENT: 340/471, 468, 472, 475; 362/466, 583

=> d acc 5212655, ccls

US PAT NO: 5,212,655 [IMAGE AVAILABLE] ANS: 1
US-CL-CURRENT: 702/155; 348/141; 702/166

=> d acc 5558424, ccls

US PAT NO: 5,558,424 [IMAGE AVAILABLE] ANS: 1
US-CL-CURRENT: 362/542, 286, 386, 493, 523

=> s ball (3w) plunger

179030 BALL
66171 PLUNGER
L1 925 BALL (3W) PLUNGER

=> s ball (w) plunger

179030 BALL
66171 PLUNGER
L2 374 BALL (W) PLUNGER

=> s pan and tilt

37102 PAN
49116 TILT
L3 1716 PAN AND TILT

=> s l3 (1w) camera

WARNING - PROXIMITY OPERATOR PRECEDENCE LEVEL CONFLICTS OR IS NOT CONSIS
TENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L3 (1W) CAMERA'
64429 CAMERA
L4 535 L3 (1W) CAMERA

=> s l4 andl2

MISSING OPERATOR 'L4 ANDL2'

=> s l2 and l4

L5 0 L2 AND L4

=> s 12 and camera

64429 CAMERA

L6 9 L2 AND CAMERA

=> d 16, kwic, 1-2

US PAT NO: 5,737,657 [IMAGE AVAILABLE] L6: 1 of 9
TITLE: Adjustable platform having a quick release mechanism for
use with a camera

ABSTRACT:

An adjustable platform is used with a camera support system which includes a camera support and a support apparatus. The adjustable platform includes a platform, a mounting plate, to which a camera is attached, and a quick release mechanism. The platform has a surface, a first downwardly innerly beveled sidewall and a . . .

SUMMARY:

BSUM(2)

The invention relates to an adjustable platform having a quick release mechanism for use with a camera.

SUMMARY:

BSUM(3)

U.S. Pat. No. 4,474,439 teaches a camera support system which includes a tube, a three-axis gimbal, a mounting plate and a plurality of auxiliary pieces of camera equipment. The tube is hollow and upright. The mounting plate can preferably be removably affixed to the tube in a secure, mechanical interconnection by a screw which is of suitable strength to releasably secure a camera to the mounting plate. The tube terminates upwardly in the mounting plate and terminates downwardly in either a permanently or . . . cap acts to prevent the components from inadvertently slipping off of the tube while being positioned. The auxiliary pieces of camera equipment include a video monitor, a battery pack and an electronics package which is suitable for operation of the camera and the video monitor. The auxiliary pieces of camera equipment are preferably arranged in an annular configuration including a central bore of a size to overfit and slide upwardly. . . to the tube in a preferred location below the mounting plate and slightly above the center of gravity of the camera support system. The three-axis gimbal includes a link for connection to the mounting post. The mounting post is similar to. . .

SUMMARY:

BSUM(4)

The camera is mounted onto the mounting plate so that its center of gravity is directly over the body. This can be determined by holding the mounting plate with both hands, one on either side of the body and sliding the camera fore and aft until the camera support hangs level. Then lock the position of the camera with the conventional locking arrangements provided. Next tilt the camera support and the camera forward ninety degrees and hold it entirely by the gimbal or balance the gimbal ring on a pivot. The gimbal. . . be moved back and

forth along the body until the gimbal is directly over the center of gravity of the camera support. Therefore the camera support hangs in "neutral balance." If the camera is nearly centered side to side on the mounting plate, any remaining slight deviation in side-to-side balance can be compensated. . . . to one side, can be compensated by the counter-adjustment of the appropriate other component. In making a picture with a camera it is extremely important that the camera be maintained in as stable a position as possible in order to obtain high quality results. Such stability has been achieved by mounting the camera on a tripod which supports the camera on a stationary support so as to eliminate any possibility of undesirable camera motion.

SUMMARY:

BSUM(5)

U.S. . . . rotatably interconnected arm. The second end of the second rotatably interconnected arm is arranged and configured to support the portable camera. The first and second spring mechanisms are coupled to the first and second rotatably interconnected arms, respectively, in order to. . . .

SUMMARY:

BSUM(6)

U.S. Pat. No. 4,017,168 teaches a camera support system which enables a mobile photographer to take high quality, ambulatory hand-held photographs with a motion picture camera. The camera support system includes a support apparatus and a camera support. The camera support has the mass of the camera support and the camera distributed at points which are remote from each other about a handle in a manner so that the handle is located at approximately the center of the moment of inertia of the combined sled and portable camera. Employment of the camera support increases inherent stability in a manner which permits a cameraman to obtain high quality results when utilizing hand-held equipment. The support apparatus permits the camera support to float freely in a manner to isolate the camera from any movement of the cameraman.

SUMMARY:

BSUM(7)

U.S. Pat. No. 4,017,168 and U.S. Pat. No. 4,208,028 teach the type of camera stabilizing systems which are currently available. One popular camera stabilizing system licensed under U.S. Pat. No. 4,017,168 is currently being sold by Cinema Products Corporation, Los Angeles, Calif., under. . . . have generally achieved the desired purpose of greatly improving the quality of hand-held cinematography, the configuration and construction of the camera equipment support elements of these presently available types have not proved equal to the continuous advance in the versatility of. . . .

SUMMARY:

BSUM(8)

Camera supports and camera stabilizing systems have increased in popularity and utilization over the past several years. Such systems have become an accepted additional. . . . quality of results than previously possible with hand-held cameras when site limitations render the use of a

conventionally dolly mounted ~~camera~~ too expensive, restrictive or time consuming.

SUMMARY:

BSUM(9)

Operators . . . which are now routinely employed weigh as much as forty pounds with a super-speed lens, a lighter construction of the ~~camera~~ support itself would ease the operator's burden and allow him greater endurance.

SUMMARY:

BSUM(11)

The equipment support includes a platform for receiving the ~~camera~~. The platform is counterbalanced by a view finding device and a battery or batteries for operating the equipment. The platform further preferably incorporates an adjustment mechanism which is an "x-y" table and which permits relative adjustment of the ~~camera~~ receiving platform to achieve an appropriate balance of the resulting unit. This adjustment mechanism includes a fitting for receiving the. . .

SUMMARY:

BSUM(13)

The present invention is generally directed to an adjustable platform for use in a ~~camera~~ support system which includes a ~~camera~~ support and a support apparatus. The ~~camera~~ support includes a tube, a three-axis gimbal, a video monitor, a battery pack, an electronics package and a junction box, a clamp ring and a mounting plate. A ~~camera~~ is attached to the mounting plate.

DRAWING DESC:

DRWD(3)

FIG. 2 is a perspective drawing of a ~~camera~~ support which includes a tube, a three axis gimbal, a video monitor, a battery pack, an electronics package, a junction. . .

DRAWING DESC:

DRWD(10)

FIG. 9 is a top plan of a mounting plate, to which a ~~camera~~ is attached, and the adjustable platform of FIG. 2 with the quick release mechanism of FIG. 3 securing the mounting. . .

DETDESC:

DETD(2)

Referring to FIG. 1 a ~~camera~~ support system includes a support apparatus 10. The support apparatus 10 includes a support vest 11, a first arm 12. . .

DETDESC:

DETD(3)

Referring to FIG. 2 the camera support system also includes a camera support 20. The camera support 20 includes a tube 21, a three-axis gimbal 22, a video monitor 23, a battery pack 24 and an. . . coupled to the post 16 of the support apparatus 10. The electronics package 25 is suitable for operation of a camera and the video monitor 23. The clamp rings 27 secures the junction box 26 to the tube 21.

DETDESC:

DETD(4)

Referring to FIG. 1 in conjunction with FIG. 2 the camera support system enables a mobile photographer to take high quality, ambulatory hand-held photographs with the camera. The combined mass of the camera support 20 and the camera is distributed at points which are remote from each other about a handle in a manner so that the handle is located at approximately the center of the moment of inertia of the camera support 20 and the camera. The camera support 20 increases inherent stability in a manner which permits a cameraman to obtain high quality results when utilizing hand-held equipment. The support apparatus 10 permits the camera support 20 to float freely in a manner to isolate the camera from any movement of the cameraman.

DETDESC:

DETD(5)

Referring . . . in a mounting disc 28. The mounting disc 28 is affixed to the tube 21 by a screw 29. The camera support 20 also includes an adjustable platform 30 which has a first stage 31, a second stage 32 and a. . .

DETDESC:

DETD(10)

Referring . . . mechanism 70 also includes two pins 76, a locking screw 77, a spring 78 and a screw 79 with a ball-plunger 80 which is resiliently biased. The cam lever 73 has a pair of notches 81. The two pins 76 are. . . locking plate 71 to the third plate 55. The screw 79 is fixedly coupled to the locking plate 71. The ball-plunger 80 of the screw 79 engages one of the notches 81, as shown in FIG. 7 and in phantom lines. . . therefor. When the cam lever 73 is in its open position as shown in phantom lines in FIG. 6 the ball-plunger 80 of the screw 79 engages the other notch 81, as shown in phantom lines in FIG. 6, of the. . .

DETDESC:

DETD(12)

Referring . . . open the quick release mechanism 70. When the quick release mechanism 70 is open, the mounting plate 90 and the camera may be placed onto the top of the third plate 55. When the quick release mechanism 70 is closed and. . . mechanism 70 results in an easily and quickly produced, yet slidably secure mounting for the mounting plate 90 for the camera. The lateral and longitudinal adjustment mechanisms 34 and 35 operate to readily accommodate variations in cameras, as well as variations in placement of the mounting plate 90 for the base of the camera upon the adjustable platform 30 thus avoiding the need for a particularly careful placement of the mounting plate with the base of the camera mounted thereon thereby simplifying use of the camera.

support 20. Stabilization of the camera 20 support is accomplished by adjustment of the unit to appropriately position its center of gravity for stabilized operation. This center of gravity is established, outside of the camera, by the expanded, balanced arrangement of the various components including the camera support 20, the adjustable platform 30, the mounting plate 90, the camera and the plurality of auxiliary camera equipment.

DETDESC:

DETD(13)

From . . . foregoing it can be seen that a quick release mechanism which secures a mounting plate for a base of a camera to an adjustable platform has been described. The quick release mechanism, when it is open, allows the mounting plate to. . .

CLAIMS:

CLMS(1)

What is claimed is:

1. An adjustable platform for use with a camera, said adjustable platform comprising:
 - a. a platform having a surface, a first downwardly innerly beveled sidewall and a second downwardly innerly beveled sidewall;
 - b. a mounting plate, which has a first sidewall and a second sidewall and to which the camera is attached, disposed on said platform whereby said first and second downwardly innerly beveled sidewalls loosely engage said first and. . . and fixedly coupled to said platform;
 - vi. a spring resiliently coupling said locking plate to said platform;
 - vii. a screw having a ball-plunger which is resiliently biased and being fixedly coupled to said locking plate whereby said ball-plunger of said screw engages one of said notches of said cam lever to provide a stop therefor; and
 - viii. a locking. . .

US PAT NO: 5,701,821 [IMAGE AVAILABLE]

L6: 2 of 9

DETDESC:

DETD(53)

When . . . above the upper surface of the casing 634 and does not supply the WA. As shown in FIG. 17, a ball-plunger 654 is provided in the other end portion of each of the arms 650 which is opposite to the one end portion thereof to which the supplying member 644 is attached. The ball-plunger 654 includes a ball 656 which is received in an externally threaded, cylindrical casing with a bottom wall such that. . .

DETDESC:

DETD(89)

The . . . supplied from the load sensors 148, the thrusting-pressure sensor 473, the upper-position sensor 478, the lower-position sensor 484, a CCD camera 950, and a laser displacement sensor 952. An input device 954 is connected to the control device 130. The control. . . 780, the wiping-head elevating air cylinder 812, the WS feeding air cylinder 832, the engaging air cylinder 918, and a CCD-camera and

=> s fov

Sep. 25, 1998

Clair 13

L23

712 FOV

=> s 123 (w) stabilize? (xw) camera

217700 STABILIZE?

64429 CAMERA

L24

0 L23 (W) STABILIZE? (XW) CAMERA

=> s 123 (a) stabiliz?

266306 STABILIZ?

L25

0 L23 (A) STABILIZ?

=> s field (1w) view

1166616 FIELD

1632897 VIEW

L26

17953 FIELD (1W) VIEW

=> s 126 (xw) camera

64429 CAMERA

L27

3333 L26 (XW) CAMERA

=> s 126 (xw) stabiliz?

266306 STABILIZ?

L28

173 L26 (XW) STABILIZ?

=> s 128 (xw) camera

64429 CAMERA

L29

8 L28 (XW) CAMERA

=> s 128 (3w) camera

64429 CAMERA

L30

0 L28 (3W) CAMERA

=> s 126 (xw) stabiliz?

266306 STABILIZ?

L31

173 L26 (XW) STABILIZ?

=> 126 (w) stabiliz?

'L26' IS NOT A RECOGNIZED COMMAND

=> s 126 (w) stabiliz?

266306 STABILIZ?

L32

0 L26 (W) STABILIZ?

=> s 126 (3w) stabiliz?

266306 STABILIZ?

L33

10 L26 (3W) STABILIZ?

=> s 126 stabiliz? (3w) camera

MISSING OPERATOR 'L26 STABILIZ?'

=> s stabiliz? (3w) camera

266306 STABILIZ?

64429 CAMERA

L34 186 STABILIZ? (3W) CAMERA

=> s stabiliz? (w) camera

266306 STABILIZ?

64429 CAMERA

L35 40 STABILIZ? (W) CAMERA

=> s 126 (a) 135

L36 0 L26 (A) L35

=> s 126 (xw) 135

L37 0 L26 (XW) L35

=> s 126 (p) 135

L38 2 L26 (P) L35

=> d 138 ti, ccls, ab

US PAT NO: 5,229,798 [IMAGE AVAILABLE] L38: 1 of 2
TITLE: Stabilized equipment support, primarily for use with
hand-held cameras
US-CL-CURRENT: 352/243; 396/421

ABSTRACT:

A stabilized equipment support which is both small and light-weight in construction, for receiving equipment (e.g., a camera) with which it is to be used upon an expanded support network which complements the supported equipment in a manner which not only alters the position of the center of gravity for effective support of the resulting assembly, but which further ensures that the equipment support can be folded into a compact arrangement which does not significantly increase the profile, or overall size of the assembled combination, yet which is easily deployed to assume an expanded balanced arrangement which is appropriate for stabilized operations of the resulting assembly in simple and straightforward fashion, while minimizing the potential for precession during such use.

=> d 138 ti, ccls, ab, 2

US PAT NO: 5,093,677 [IMAGE AVAILABLE] L38: 2 of 2
TITLE: Apparatus for mounting a remote controlled,
gyro-stabilized camera externally on a helicopter
US-CL-CURRENT: 396/13; 244/17.11, 118.2, 129.6; 396/419

ABSTRACT:

A truss-type structure for supporting a relatively large, heavy gyro-stabilized camera pod in a position forward of a helicopter nose, is connected to the brackets normally used for mounting the helicopter's

* * * * *
* W E L C O M E T O T H E *
* U . S . P A T E N T T E X T F I L E *
* * * * *

Claim 17

10/1/98

=> s moisture (3a) passage

143344 MOISTURE
393682 PASSAGE
L1 1163 MOISTURE (3A) PASSAGE

=> s l1 (3w) plug

155748 PLUG
L2 2 L1 (3W) PLUG

=> l2 and camera

'L2' IS NOT A RECOGNIZED COMMAND

=> s l2 and camera

64585 CAMERA
L3 0 L2 AND CAMERA

=> s l1 (xa) plug

155748 PLUG
L4 19 L1 (XA) PLUG

=> s l4 and camera

64585 CAMERA
L5 0 L4 AND CAMERA

=> d l2, kwic, 1-

US PAT NO: 4,274,403 [IMAGE AVAILABLE]

L2: 1 of 2

DETDESC:

DETD(6)

Body . . . FIG. 3. Any suitable materials could be used for plug 22 as long as such materials are porous to the **passage** of **moisture**. **Plug** 22 effectively divides body 10 into two elongated storage chambers generally referred to as 24 and 26. While shoulder 20. . .

US PAT NO: 3,812,310 [IMAGE AVAILABLE]

L2: 2 of 2

SUMMARY:

BSUM(8)

In . . . conductors when properly positioned in the apertures are soldered in place forming a sealed jack plug connector which prohibits the **passage** of **moisture** from the jack **plug** aperture into the interior of the electrical device.

=> d l2, ti, ccls, ab, 1-

US PAT NO: 4,274,403 [IMAGE AVAILABLE]

L2: 1 of 2

TITLE: Inhaler
US-CL-CURRENT: 128/203.15

ABSTRACT:

An inhaler (2) includes a body (10) having a dispensing head (6) coupled thereto. Body (10) includes a storage chamber (24) for storing a supply of powdered drugs therein and a storage chamber (26) for holding a dessicating agent. A dispensing cylinder (60) contained in a transverse bore (40) in dispensing head (6) is laterally movable from a first transverse position in which a metering chamber (70) is in alignment with the feed hole (38) to a second transverse position in which chamber (70) communicates with the dispensing passageway (48) of nozzle (30). In the first transverse position, metering chamber (70) may be filled and in the second transverse position the drugs contained in chamber (70) may be inhaled through nozzle (30). In addition, a cylindrical insert (76) received around dispensing cylinder (60) seals storage chamber (24) when inhaler (2) is not in use.

US PAT NO: 3,812,310 [IMAGE AVAILABLE] L2: 2 of 2
TITLE: SEALED PRINTED CIRCUIT JACK PLUG CONNECTOR
US-CL-CURRENT: 200/51R, 51.1; 361/760

ABSTRACT:

A jack plug connector having a four sided hollow non-conductive housing with plug contacts mounted therein for contacting the jack plug. The contacts have tabs thereon which fit into apertures in printed circuit boards which are secured to each side of the housing and form the top and bottom walls of the housing. Components and conductors are secured in the apertures of the printed circuit board and all the apertures are sealed as by soldering.

=> s l4 and flexible (xw) wires

373242 FLEXIBLE

142436 WIRES

8892 FLEXIBLE (XW) WIRES

L6 1 L4 AND FLEXIBLE (XW) WIRES

=> d kwic

US PAT NO: 4,408,695 [IMAGE AVAILABLE]

L6: 1 of 1

SUMMARY:

BSUM(4)

The . . . box for wires. A suitable tool can then be used by the electrician to penetrate the cover near the knockout **plug**, and engage and remove the knockout **plug**, leaving an opening in the electrical box to receive a wire. The wire can then be pushed through the small . . . into the box. The wire thereby achieves a tight fit with the cover which resists flow of air and the **passage of moisture**. With the cover molded on the box with the fastening flange extending therethrough, a sealed fit is also achieved between the cover and the fastening flange to again prevent flow of air or the **passage of moisture** between the box and the flange.

CLAIMS:

CLMS(8)

8. . . . a fastening flange extending outwardly from said box and fastened to said structural member, and a cover made of a **flexible** plastic material, said cover being of the same general shape as said box and receiving and enclosing the side walls. . . . of said box, said cover having an open face in which said box is received, said cover having a narrow, **flexible**, thin-wall flange extending outwardly therefrom, said flange being in a stressed condition in contact with the back surface of said wall or the like from which said electrical box projects, with the outer peripheral portions of the **flexible**, thin-wall flange exerting greater pressure against the back surface of the wall or the like than the inner portions of. . . . and having a sealed fit to prevent any air or moisture from entering the cover around said fastening flange, and **wires** entering said box through said cover and tightly fitting therewith to prevent any air or moisture from entering the cover around the **wires**.

=> d ti, ccls, ab

US PAT NO: 4,408,695 [IMAGE AVAILABLE]

L6: 1 of 1

TITLE: Air and moisture resistant cover with electrical box
having fastening flange

US-CL-CURRENT: 220/3.3; 174/57; 220/3.8, 3.92, 3.94

ABSTRACT:

A cover is provided for an electrical box with a fastening flange, particularly when the box is installed in an outside wall or ceiling,

back of which is a cooler space. The cover extends around all of the electrical box except the open face, with the fastening flange extending through the cover in an air and moisture tight relationship. The cover has a slanted, thin-wall flange which contacts and seals against the back surface of the wall or ceiling panel in which the box is mounted. The cover prevents cold air from entering the building through or around the box and heated air from escaping from the interior of the building. The cover also prevents water or moisture from entering the box from the outside. The electrical box and the cover are handled and installed as one unit to minimize extra labor. Preferably, the cover is molded on the box with portions spaced from the box where knockout plugs for wires are located.